

**Remarks**

In view of the following discussion, the applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

**OBJECTIONS****A. Specification**

The Examiner objects to the specification because it does not provide antecedent basis for the subject matter of claims 16-17. The specification provides antecedent basis for the subject matter of claim 16 at page 9, lines 3-5 where it states " this third source position may optionally be positioned from at least one location between  $-X - \Delta X$  and  $-X + \Delta X$ ". Further, the specification provides antecedent basis for the subject matter of claim 17 at page 10, lines 12-14 where it states "the third source position may also be positioned from at least one location between  $X - \Delta X$  and  $X + \Delta X$ ". As such, the basis for the Examiner's objection to the specification has been removed. It is respectfully requested that this objection be withdrawn.

REJECTIONS

## A. 35 U. S. C. § 103

1. Claims 1-8 and 13-20 are not obvious over LaPeruta et al. in view of Yamazaki et al.

Claims 1-8 and 13-20 stand rejected under 35 U. S. C. § 103(a) as obvious over LaPeruta et al. (U. S. Patent 6,013,400 issued January 11, 2000) in view of Yamazaki et al. (European patent application EP 0 146 226 A2 published June 26, 1985). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 1 is directed to a method of manufacturing a light-absorbing matrix for a cathode-ray tube (CRT) (*see*, specification at page 2, lines 27-30). The light absorbing matrix is formed on an inner surface of a faceplate panel of the cathode-ray tube and includes a plurality of substantially equally sized openings (*see*, specification at page 6, lines 3-10). A color selection electrode is spaced from the inner surface of the faceplate panel, the color selection electrode having a plurality of slots (*see*, specification at page 5, lines 5-8). The light absorbing matrix is formed by exposing a first photoresist layer formed on the interior surface of the faceplate panel to light through the plurality of slots in the color selection electrode, wherein the light is generated from three source locations including two outer source positions and an inner source position, wherein the two outer source positions are symmetrically located about the inner source position, and wherein the inner source position is a central source position (*see*, FIG. 6 and the specification at page 6, line 28 to page 7, line 2). Unexposed portions of the first photoresist layer are removed, the interior surface of the faceplate panel is overcoated with a light-absorbing matrix material and retained portions of the first photoresist layer are removed to form first guardbands of light-absorbing material on the inner surface of the faceplate panel (*see*, FIGS.

5c-5e and the specification at page 7, line 19 to page 8, line 21). Forming second guardbands of light-absorbing material and third guardbands of light-absorbing material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are asymmetrically located with respect to the inner source positions (see, FIGS. 8 and 10 and the specification at page 8, line 22 to page 10, line 34).

LaPeruta et al. describes a method of manufacturing a light absorbing matrix for a cathode ray tube (see, LaPeruta et al. at column 1, lines 5-10). In LaPeruta et al. each of first, second and third guardbands are formed using only two source locations for each of first, second and third exposure steps (see, LaPeruta et al at FIGS. 7, 13 and 19 and column 5, line 57 to column 7, line 38).

LaPeruta et al. does not describe or suggest a method of manufacturing a light-absorbing matrix including a plurality of substantially equally sized openings on an inner surface of a faceplate panel of the cathode-ray tube by exposing a first photoresist layer using three source locations including two outer source locations positioned symmetrically an inner source position to form first guardbands of light absorbing material and forming second guardbands of light-absorbing material and third guardbands of light-absorbing material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are asymmetrically located with respect to the inner source positions. Rather, LaPeruta et al. teaches a completely different arrangement where each of first, second and third guardbands are formed using only two source locations for each of first, second and third exposure steps. Since LaPeruta et al. does not teach a method of manufacturing a light-absorbing matrix including a plurality of substantially equally sized openings on an inner surface of a faceplate panel of the cathode-ray tube by exposing a first photoresist layer using three source locations including two outer source locations positioned symmetrically an inner source position to form first

guardbands of light absorbing material and forming second guardbands of light-absorbing material and third guardbands of light-absorbing material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are asymmetrically located with respect to the inner source positions, claim 1 is patentable over LaPeruta et al.

Yamazaki et al. describes a method of manufacturing a light absorbing matrix for a cathode ray tube (see, Yamazaki et al. at page 1, lines 3-6). In Yamazaki et al. three equidistant source locations are used for exposing the stripes of light absorbing material (see, Yamazaki et al at FIG. 4 and page 6, lines 1-11).

Yamazaki et al. does not describe or suggest a method of manufacturing a light-absorbing matrix including a plurality of substantially equally sized openings on an inner surface of a faceplate panel of the cathode-ray tube by exposing a first photoresist layer using three source locations including two outer source locations positioned symmetrically an inner source position to from first guardbands of light absorbing material and forming second guardbands of light-absorbing material and third guardbands of light-absorbing material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are asymmetrically located with respect to the inner source positions. Rather, Yamazaki et al. teaches a completely different arrangement where three equidistant source locations are used for exposing the stripes of light absorbing material. Since Yamazaki et al. does not teach a method of manufacturing a light-absorbing matrix including a plurality of substantially equally sized openings on an inner surface of a faceplate panel of the cathode-ray tube by exposing a first photoresist layer using three source locations including two outer source locations positioned symmetrically an inner source position to from first guardbands of light absorbing material and forming second guardbands of light-absorbing material and third guardbands of light-absorbing

material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are **asymmetrically** located with respect to the inner source positions, claim 1 is patentable over Yamazaki et al.

Furthermore, since LaPeruta et al. teaches an arrangement where each of first, second and third light absorbing guardbands are formed using only two source locations for each of first, second and third exposure steps and Yamzaki et al. teaches an arrangement where three equidistant source locations are used for exposing the stripes of light absorbing material, the combination of these references does not describe or suggest the subject matter of claim 1. In particular, claim 1 recites a method of manufacturing a light-absorbing matrix including a plurality of substantially equally sized openings on an inner surface of a faceplate panel of the cathode-ray tube by exposing a first photoresist layer using three source locations including two outer source locations positioned **symmetrically** an inner source position to form first guardbands of light absorbing material **and** forming second guardbands of light-absorbing material and third guardbands of light-absorbing material, using a second photoresist layer and a third photoresist layer, respectively, wherein two source locations of the three source locations for each of the second and third exposure steps are **asymmetrically** located with respect to the inner source positions. Thus, claim 1 is patentable over LaPeruta et al. in view of Yamazaki et al.

Independent claims 13 and 18-20 recite subject matter similar to claim 1. Claims 2-8 and 14-17 depend directly, or indirectly from claims 1 and 13, respectively. As such, the applicants submit that claims 2-8 and 13-20 are also patentable over Stalling et al. in view of Yamazaki et al.


## **CONCLUSION**

Thus, the applicants submit that none of the claims, presently in the application, are obvious under the provisions of 35 U. S. C. § 103. Consequently,

the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Patricia A. Verlangieri", is written over a horizontal line.

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